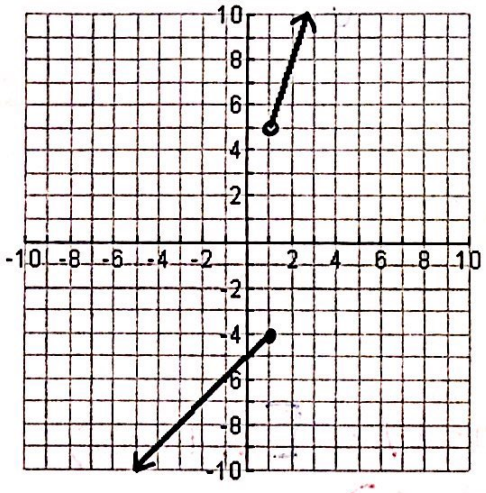
AFM
Domain and Range of Piecewise Functions

Name: Key
Date: _____ Period: _____

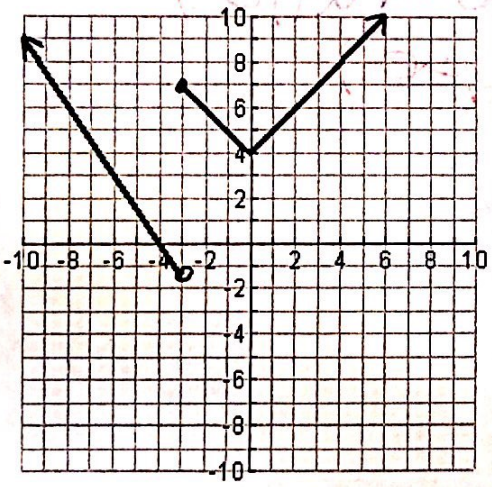
State the domain and range of each function. For what values in the domain are the functions is increasing/decreasing?

1)



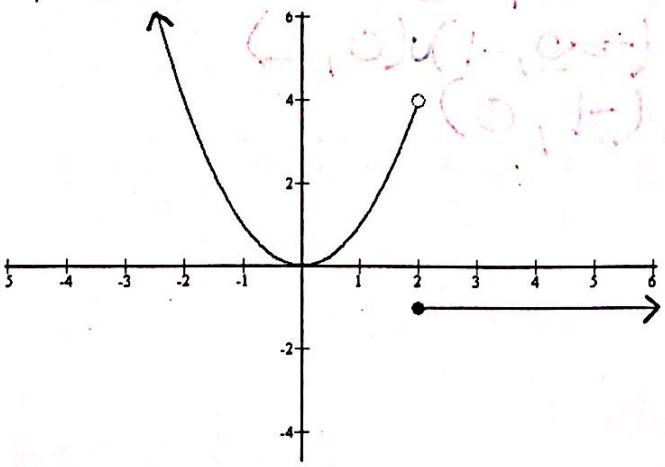
Domain: $\mathbb{R}$
Range: $(-\infty, -4] \cup (5, +\infty)$
Increasing: $(-\infty, +\infty)$
Decreasing: none

2)



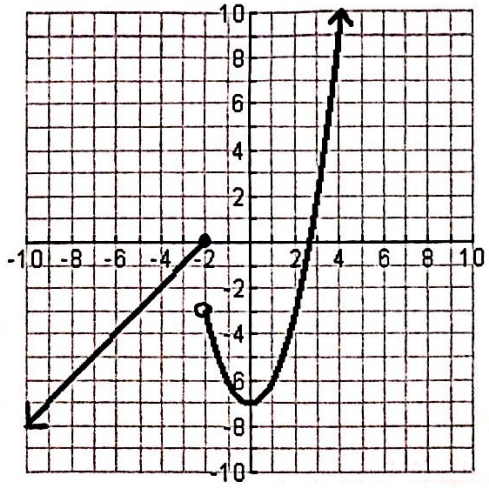
Domain: $\mathbb{R}$
Range: $(-1, +\infty)$
Increasing: $(0, \infty)$
Decreasing: $(-\infty, 0)$

3)



Domain: $\mathbb{R}$
Range: $[-1, -1] \cup [0, +\infty)$
Increasing: $(0, 2)$
Decreasing: $(-\infty, 0)$

4)



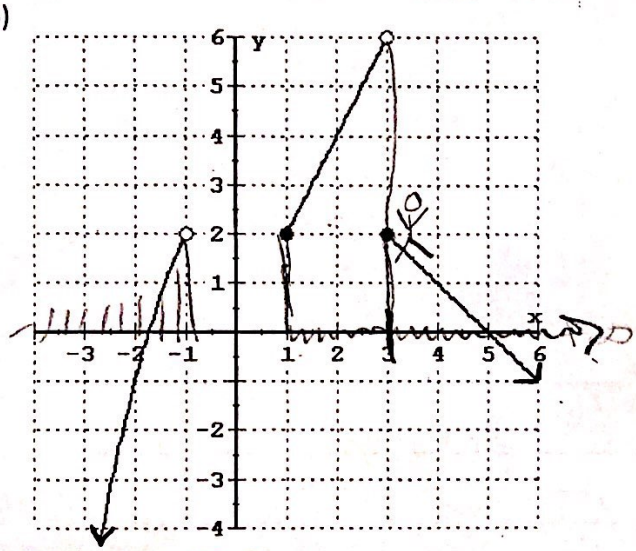
Domain: $\mathbb{R}$

Range: $\mathbb{R}$

Increasing: $(-\infty,-2)\cup(0,\infty)$

Decreasing: $(-2,0)$

5)



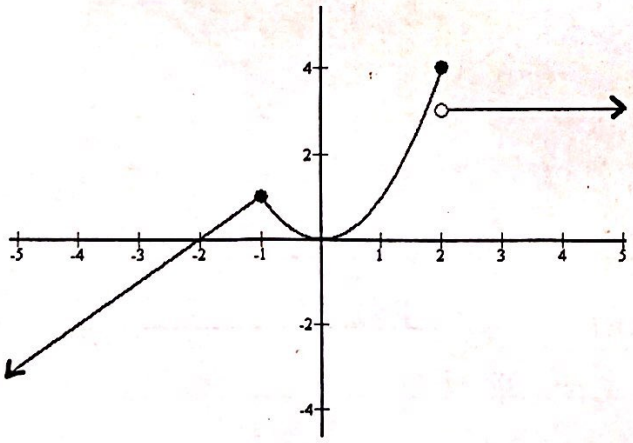
Domain: $(-\infty,-1)\cup[1,+\infty)$

Range: $(-\infty,6)$

Increasing: $(-\infty,-1)\cup(1,3)$

Decreasing: $(3,\infty)$

6)



Domain: $\mathbb{R}$

Range: $(-\infty,4]$

Increasing: $(-\infty,-1)\cup(0,2)$

Decreasing: $(-1,0)$